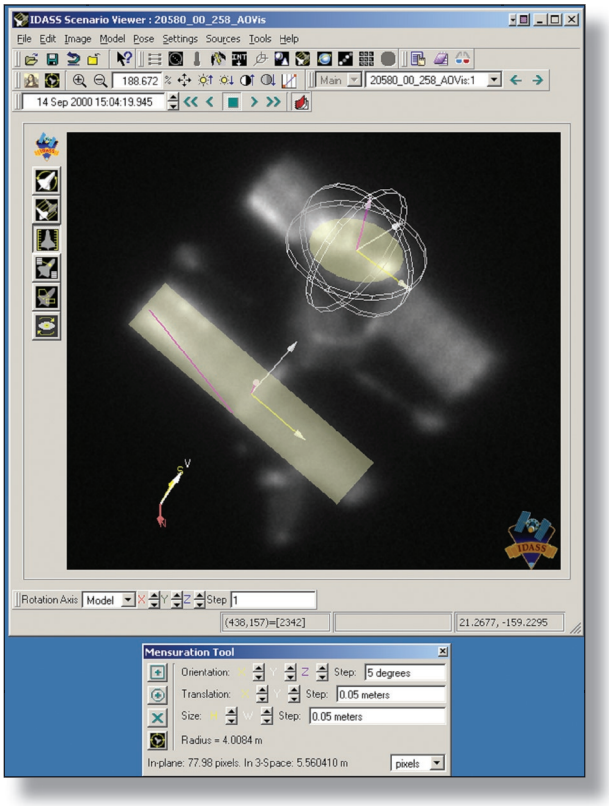
Air Force Research Laboratory|AFRL

Science and Technology for Tomorrow's Air and Space Force

Success Story

IDASS CHOSEN FOR SPACE SITUATIONAL AWARENESS TEST BED



The Directed Energy Directorate's Intelligence Data Analysis System for Spacecraft (IDASS) software provides visualization and analysis tools to fuse sensed data and space object models to aid assessment of space object health and status. IDASS supports the workflow of surveillance system operators with efficient data management and familiar data presentations.

IDASS also supplies the needs of researchers with generalized data representations and flexible processing. The software supports simulated three-dimensional viewing to enhance space situational awareness (SSA) by providing an improved picture of the mission payload status and on-orbit damage assessments of both friendly and potentially hostile space objects.

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Accomplishment

The directorate's Satellite Assessment Center (SatAC) recently transitioned a mature SSA software technology into an operational test bed environment at Air Force Space Command (AFSPC). The 14th Air Force (AF) requested AFSPC to include this technology in the test bed to provide a more useful, fused space common operational picture (Space COP).

The SatAC worked for 5 years to develop a revolutionary SSA workstation to fuse 21st century technological information from diverse sources into a more formidable Space COP. The 14th AF recognized this accomplishment and solicited AFSPC's support in inserting this software into a highly visible and challenging test bed environment with the hopes of greatly augmenting the space warfighters' information and insight into the space battlespace.

Background

The directorate's SatAC, an AFRL Center of Excellence in space object assessment technologies, developed IDASS from the ground up in order to fuse diverse types of satellite information from various stove-piped sources. The directorate successfully demonstrated IDASS at the Joint Expeditionary Forces Experiment 1999 and 2000 and has a growing user base throughout the space intelligence community.

The IDASS software runs on Intel®-based workstations under the Microsoft® Windows® NT/2000 operating system, Silicon Graphics, Inc. workstation computers under the IRIX® 6.5 operating system, and Sun™ UltraSPARC® workstations under the Solaris™ operating system.

Directed Energy
Technology Transfer

Additional information

To receive more information about this or other activities in the Air Force Research Laboratory, contact TECH CONNECT, AFRL/XPTC, (800) 203-6451 and you will be directed to the appropriate laboratory expert. (03-DE-02)